Network-Based Recording of Video Calls Using Cisco Unified Border Element

Cisco Unified Border Element supports media forking for both audio and video streams. It also supports the recording of video calls using video-media forking to forward video streams to the Cisco MediaSense application, which records the video call in the Cisco MediaSense server.

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Prerequisites for Network-Based Recording of Video Calls Using Cisco Unified Border Element

You must have an ISR G2 router equipped with the unified communication technology package configured as a Cisco UBE in flow-through mode for the Network-Based Recording Using Cisco UBE feature to function.

Cisco Unified Border Element

- Cisco IOS Release 15.3(3)M or a later release must be installed and running on your Cisco Unified Border Element.

Cisco Unified Border Element (Enterprise)

- Cisco IOS XE Release 3.10S or a later release must be installed and running on your Cisco ASR 1000 Series Router.

Restrictions for Network-Based Recording of Video Calls Using Cisco Unified Border Element

- This feature is not supported for any call flows other than SIP-SIP call flows.
- This feature is not supported for any platform other than ISR G2 platforms (2901, 2911, 2921, 2951, 3945, 3945E).
- If the main call has multiple video streams (m-lines), the video streams other than the first video m-line are not forked.
- Application media streams of the primary call are not forked to the recording server.
- Forking is not supported if the anchor leg or recording server is on IPv6.
- High availability is not supported on forked video calls.

Information About Network-Based Recording of Video Calls Using Cisco Unified Border Element

Cisco Unified Border Element records video calls by setting up a Session Initiation Protocol (SIP) call with the Cisco MediaSense server and forking the media to the Cisco MediaSense server for recording. In this scenario, Cisco Unified Border Element acts as a recording client and Cisco MediaSense acts as a recording server.

Full Intra-Frame Request

Full Intra-Frame Request is a request sent for an I-frame. An I-frame is an entire key or reference frame that is compressed without considering preceding or succeeding video frames. Succeeding video frames are differences to the original I-frame (what has moved) instead of entire video frame information.

The call between Cisco Unified Border Element and the Cisco MediaSense server is established after the call between the endpoints is established. As a result, the Real-Time Transport Protocol (RTP) channel between the endpoints gets established first and the RTP channel with the recording server gets established later. The impact of this delay is more on video recording because the initial I-frame from the endpoint may not get forked, and frames that follow cannot get decoded. To mitigate the impact of the lost RTP video packets, Cisco Unified Border Element generates Full Intra-Frame Request (FIR) using either Real-Time Transport Control Protocol (RTCP) or SIP INFO, or both, requesting the endpoint to send a fully encoded video frame in the subsequent RTP packet.

The following types of FIR are supported on network-based recording of video calls using Cisco Unified Border Element:

- RTCP FIR (based on RFC 5104).
- SIP INFO FIR (based on RFC 5168).
- Both RTCP FIR and SIP INFO FIR (Cisco Unified Border Element can be configured to send both RTCP FIR and SIP INFO requests at the same time).

Architecture and Flow

For more information about Network-Based Recording, see Information About Network-Based Recording Using Cisco UBE.

How to Configure Network-Based Recording of Video Calls Using Cisco Unified Border Element

Configuring the Media Profile Recorder

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **media profile recorder** *profile-tag*
4. **media-recording** *dial-peer-tag* [*dial-peer-tag2...dial-peer-tag5*]
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**media profile recorder** *profile-tag* **Example:** `Device(config)# media profile recorder 100`	Configures the media profile recorder and enters media profile configuration mode.
Step 4	**media-recording** *dial-peer-tag* [*dial-peer-tag2...dial-peer-tag5*] **Example:** `Device(cfg-mediaprofile)# media-recording 2000`	Sets voice-class recording parameters. **Note** You can specify a maximum of five dial-peer tags.
Step 5	**end** **Example:** `Device(cfg-mediaprofile)# end`	Exits media profile configuration mode.

Configuring the Media Class Globally

You can configure a media class globally by performing one of the following tasks:

Configuring a Media Class Using the Media Profile Recorder

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **media class** *tag*
4. **recorder profile** *tag*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**media class** *tag* **Example:** `Device(config)# media class 100`	Configures a media class and enters media class configuration mode.
Step 4	**recorder profile** *tag* **Example:** `Device(cfg-mediaclass)# recorder profile 100`	Configures the media profile recorder.
Step 5	**end** **Example:** `Device(cfg-mediaclass)# end`	Exits media class configuration mode.

Configuring Media Class Using the Recorder Parameter

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **media class** *tag*
4. **recorder parameter**
5. **media-recording** *dial-peer-tag*
6. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**media class** *tag* **Example:** `Device(config)# media class 100`	Configures the media class and enters media class configuration mode.
Step 4	**recorder parameter** **Example:** `Device(cfg-mediaclass)# recorder parameter`	Enters media class recorder parameter configuration mode to enable you to configure recorder-specific parameters.
Step 5	**media-recording** *dial-peer-tag* **Example:** `Device(cfg-mediaclass-recorder)# media-recording 28`	Configures voice-class recording parameters. **Note** You can specify a maximum of five dial-peer tags.
Step 6	**end** **Example:** `Device(cfg-mediaclass-recorder)# end`	Exits media class recorder parameter configuration mode.

Configuring a Recorder Dial Peer

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **dial-peer voice** *tag* **voip**
4. **destination-pattern** [+] *string* [**T**]
5. **session protocol sipv2**
6. **session target ipv4:***destination-address*
7. **session transport tcp**
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enters privileged EXEC mode or any other security level set by a system administrator. Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**dial-peer voice** *tag* **voip** **Example:** `Device(config)# dial-peer voice 24 voip`	Specifies the method of voice encapsulation and enters dial peer voice configuration mode for the specified dial peer.
Step 4	**destination-pattern** [+] *string* [**T**] **Example:** `Device(config-dial-peer)# destination-pattern 595959`	Specifies either the prefix or the full E.164 telephone number (depending on your dial plan) to be used for a dial peer. Keywords and arguments are as follows: • + --(Optional) Character that indicates an E.164 standard number. • *string* --Series of digits that specify the E.164 or private dialing plan telephone number. Valid entries are the digits 0 through 9, the letters A through D, and any special character. • **T** --(Optional) Control character indicating that the **destination-pattern** value is a variable-length dial string.

	Command or Action	Purpose
Step 5	**session protocol sipv2** **Example:** `Device(config-dial-peer)# session protocol sipv2`	Configures the VoIP dial peer to use Session Initiation Protocol (SIP).
Step 6	**session target ipv4:***destination-address* **Example:** `Device(config-dial-peer)# session target ipv4:10.42.29.7`	Specifies a network-specific address for a dial peer. Keyword and argument are as follows: • **ipv4:** *destination address* --IP address of the dial peer, in this format: *xxx.xxx.xxx.xxx*
Step 7	**session transport tcp** **Example:** `Device(config-dial-peer)# session transport tcp`	Configures a VoIP dial peer to use Transmission Control Protocol (TCP).
Step 8	**end** **Example:** `Device(config-dial-peer)# end`	Exits dial peer voice configuration mode.

Configuring the Media Class for a Dial Peer

Before You Begin

You must configure a dial peer to connect to Cisco MediaSense. This dial peer is matched with Cisco Unified Border Element and a call is set up to Cisco MediaSense.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **dial-peer voice** *tag* **voip**
4. **session protocol sipv2**
5. **incoming called-number** *string*
6. **media-class** *tag*
7. **codec** *codec* [**bytes** *payload-size*] [**fixed-bytes**] [**mode** {**independent** | **adaptive**} [**bit-rate** *value*] [**framesize** {**30** | **60**} [**fixed**]]]
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**dial-peer voice** *tag* **voip** **Example:** `Device(config)# dial-peer voice 24 voip`	Defines a particular dial peer and enters dial peer voice configuration mode.
Step 4	**session protocol sipv2** **Example:** `Device(config-dial-peer)# session protocol sipv2`	Specifies SIP version 2 for calls between local and remote routers using the packet network.
Step 5	**incoming called-number** *string* **Example:** `Device(config-dial-peer)# incoming called-number 9845`	Specifies a digit string that can be matched with an incoming call to associate the call with a dial peer.
Step 6	**media-class** *tag* **Example:** `Device(config-dial-peer)# media-class 100`	Configures media class on a dial peer.
Step 7	**codec** *codec* [**bytes** *payload-size*] [**fixed-bytes**] [**mode** {**independent** | **adaptive**} [**bit-rate** *value*] [**framesize** {**30** | **60**} [**fixed**]]] **Example:** `Device(config-dial-peer)# codec g711ulaw`	Specifies the voice coder rate of speech for a dial peer.
Step 8	**end** **Example:** `Device(config-dial-peer)# end`	Exits dial peer configuration mode and returns to privileged EXEC mode.

Enabling FIR for Video Calls Using RTCP

Perform this task to enable Full Intra-Frame Request (FIR) during the network-based recording of a video call using Real-Time Transport Control Protocol (RTCP).

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **media profile video** *media-profile-tag*
4. **ref-frame-req rtcp retransmit-count** *retransmit-number*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**media profile video** *media-profile-tag* **Example:** `Device(config)# media profile video 1`	Configures a video media profile and enters media profile configuration mode.
Step 4	**ref-frame-req rtcp retransmit-count** *retransmit-number* **Example:** `Device(cfg-mediaprofile)# ref-frame-req rtcp retransmit-count 4`	Enables FIR using RTCP.
Step 5	**end** **Example:** `Device(cfg-mediaprofile)# end`	Exits media profile configuration mode.

Enabling FIR for Video Calls Using SIP INFO

Perform this task to enable Full Intra-Frame Request (FIR) during the network-based recording of a video call using the Session Initiation Protocol (SIP) INFO method.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **media profile video** *media-profile-tag*
4. **ref-frame-req sip-info**
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**media profile video** *media-profile-tag* **Example:** `Device(config)# media profile video 1`	Configures a video media profile and enters media profile configuration mode.
Step 4	**ref-frame-req sip-info** **Example:** `Device(cfg-mediaprofile)# ref-frame-req sip-info`	Enables FIR using the SIP INFO method.
Step 5	**end** **Example:** `Device(cfg-mediaprofile)# end`	Exits media profile configuration mode.

Enabling the Association of a Video Profile with a Media Class

Before You Begin

You must configure a profile for a media-type video or enable Full-Intra Frame Request (FIR).

To enable FIR using RTCP, see Enabling FIR for Video Calls Using RTCP, on page 10.

To enable FIR using SIP, see Enabling FIR for Video Calls Using SIP INFO, on page 10 .

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **media class** *media-class-tag*
4. **video profile** *video-tag*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**media class** *media-class-tag* **Example:** `Device(config)# media class 100`	Configures a media class and enters media class configuration mode.
Step 4	**video profile** *video-tag* **Example:** `Device(cfg-mediaclass)# video profile 101`	Associates a video media profile with a media class.
Step 5	**end** **Example:** `Device(cfg-mediaclass)# end`	Exits media class configuration mode.

Verifying Network-Based Recording of Video Calls Using Cisco Unified Border Element

Perform this task to verify the configuration of the Network-Based Recording of Video Calls Using Cisco Unified Border Element Configuration feature. The **show** commands can be entered in any order.

SUMMARY STEPS

1. **enable**
2. **show voip rtp connection**
3. **show voip recmsp session**
4. **show voip recmsp session detail call-id** *call-id*
5. **show voip rtp forking**
6. **show call active video compact**
7. **show call active video brief**
8. **show call active video called-number** *number* **| include VideoRtcpIntraFrameRequestCount**
9. **show call active video called-number** *number* **| include VideoSipInfoIntraFrameRequestCount**

DETAILED STEPS

Step 1 **enable**
Enables privileged EXEC mode.

Example:
```
Device> enable
```

Step 2 **show voip rtp connection**
Displays the Real-Time Transport Protocol (RTP)-named event packets

Example:
```
Device# show voip rtp connection

VoIP RTP Port Usage Information:
Max Ports Available: 8091, Ports Reserved: 101, Ports in Use: 8
Port range not configured, Min: 16384, Max: 32767

                                                Ports       Ports       Ports
Media-Address Range                             Available   Reserved    In-use

Default Address-Range                           8091        101         8

VoIP RTP active connections :
No. CallId     dstCallId  LocalRTP RmtRTP LocalIP                                    RemoteIP

1     1          2          16384    20918  10.104.45.191                             10.104.8.94

2     2          1          16386    17412  10.104.45.191                             10.104.8.98

3     3          4          16388    29652  10.104.45.191                             10.104.8.98

4     4          3          16390    20036  10.104.45.191                             10.104.8.94

5     6          5          16392    58368  10.104.45.191                           10.104.105.232

6     7          5          16394    53828  10.104.45.191                           10.104.105.232

7     8          5          16396    39318  10.104.45.191                           10.104.105.232

8     9          5          16398    41114  10.104.45.191                           10.104.105.232

Found 8 active RTP connections
```

Step 3 **show voip recmsp session**

Displays active recording Media Service Provider (MSP) session information.

Example:

```
Device# show voip recmsp session

RECMSP active sessions:
MSP Call-ID             AnchorLeg Call-ID        ForkedLeg Call-ID
5                       1                        6
Found 1 active sessions
```

Step 4 **show voip recmsp session detail call-id** *call-id*

Displays detailed information about the recording MSP Call ID.

Example:

```
Device# show voip recmsp session detail call-id 5

RECMSP active sessions:
Detailed Information
========================
Recording MSP Leg Details:
Call ID: 5
GUID : 1E01B6000000
AnchorLeg Details:
Call ID: 1
Forking Stream type: voice-nearend
Forking Stream type: video-nearend
Participant: 1777
Non-anchor Leg Details:
Call ID: 2
Forking Stream type: voice-farend
Forking Stream type: video-farend
Participant: 1888
Forked Leg Details:
Call ID: 6
Voice Near End Stream CallID 6
Stream State ACTIVE
Voice Far End stream CallID 7
Stream State ACTIVE
Video Near End stream CallID 8
Stream State ACTIVE
Video Far End stream CallID 9
Stream State ACTIVE
Found 1 active sessions
```

Step 5 **show voip rtp forking**

Displays RTP media-forking connections.

Example:

```
Device# show voip rtp forking

VoIP RTP active forks :
 Fork 1
   stream type voice-only (0): count 0
   stream type voice+dtmf (1): count 0
   stream type dtmf-only (2): count 0
   stream type voice-nearend (3): count 1
     remote ip 10.104.105.232,  remote port 58368,  local port 16392
       codec g711ulaw,  logical ssrc 0x53
       packets sent 3121,  packets received 0
   stream type voice+dtmf-nearend (4): count 0
   stream type voice-farend (5): count 1
     remote ip 10.104.105.232,  remote port 53828,  local port 16394
       codec g711ulaw,  logical ssrc 0x55
       packets sent 3121,  packets received 0
```

```
   stream type voice+dtmf-farend (6): count 0
   stream type video (7): count 0
   stream type video-nearend (8): count 1
     remote ip 10.104.105.232,  remote port 39318,  local port 16396
       codec h264,  logical ssrc 0x1E8
       packets sent 3906,  packets received 0
   stream type video-farend (9): count 1
     remote ip 10.104.105.232,  remote port 41114,  local port 16398
       codec h264,  logical ssrc 0x1E9
       packets sent 3863,  packets received 0
   stream type application (10): count 0
```

Step 6 **show call active video compact**

Displays a compact version of video calls in progress.

Example:

```
Device# show call active video compact

<callID>  A/O FAX T<sec> Codec       type        Peer Address       IP R<ip>:<udp>
Total call-legs: 3
         1 ANS     T14    H264        VOIP-VIDEO  P1777      10.104.8.94:20036
         2 ORG     T14    H264        VOIP-VIDEO  P1888      10.104.8.98:29652
         6 ORG     T13    H264        VOIP-VIDEO  P1234   10.104.105.232:39318
```

Step 7 **show call active video brief**

Displays a truncated version of video calls in progress.

Example:

```
Device# show call active video brief

Telephony call-legs: 0
SIP call-legs: 3
H323 call-legs: 0
Call agent controlled call-legs: 0
SCCP call-legs: 0
Multicast call-legs: 0
Total call-legs: 3

0    : 1 87424920ms.1 (*12:23:53.573 IST Wed Jul 17 2013) +1050 pid:1 Answer 1777 active
 dur 00:00:46 tx:5250/1857831 rx:5293/1930598 dscp:0 media:0 audio tos:0xB8 video tos:0x88
 IP 10.104.8.94:20036 SRTP: off rtt:0ms pl:0/0ms lost:0/0/0 delay:0/0/0ms H264 TextRelay: off
Transcoded: No
...
0    : 2 87424930ms.1 (*12:23:53.583 IST Wed Jul 17 2013) +1040 pid:2 Originate 1888 active
 dur 00:00:46 tx:5293/1930598 rx:5250/1857831 dscp:0 media:0 audio tos:0xB8 video tos:0x88
 IP 10.104.8.98:29652 SRTP: off rtt:0ms pl:0/0ms lost:0/0/0 delay:0/0/0ms H264 TextRelay: off
Transcoded: No
...
0    : 6 87425990ms.1 (*12:23:54.643 IST Wed Jul 17 2013) +680 pid:1234 Originate 1234 active
 dur 00:00:46 tx:10398/3732871 rx:0/0 dscp:0 media:0 audio tos:0xB8 video tos:0x0
 IP 10.104.105.232:39318 SRTP: off rtt:0ms pl:0/0ms lost:0/0/0 delay:0/0/0ms H264 TextRelay: off
Transcoded: No
...
```

Step 8 **show call active video called-number** *number* **| include VideoRtcpIntraFrameRequestCount**

Displays the number of RTCP FIR requests sent on each leg.

Example:

```
Device# show call active video called-number 990057 | include VideoRtcpIntraFrameRequestCount

! Main call legs
VideoRtcpIntraFrameRequestCount=1
VideoRtcpIntraFrameRequestCount=1
```

```
!CUBE does not generate FIR request on forked leg
VideoRtcpIntraFrameRequestCount=0
```

Step 9 **show call active video called-number** *number* **| include VideoSipInfoIntraFrameRequestCount**
Displays the number of SIP INFO FIR requests sent on each leg.

Example:

```
Device# show call active video called-number 990062 | include VideoSipInfoIntraFrameRequestCount

! Main call legs
VideoSipInfoIntraFrameRequestCount=1
VideoSipInfoIntraFrameRequestCount=1

!CUBE does not generate FIR request on forked leg
VideoSipInfoIntraFrameRequestCount=0
```

Configuration Examples for Network-Based Recording of Video Calls Using Cisco Unified Border Element

Example: Configuring the Media Profile Recorder

```
Device> enable
Device# configure terminal
Device(config)# media profile recorder 100
Device(cfg-mediaprofile)# media-recording 2000
Device(cfg-mediaprofile)# end
```

Example: Configuring the Media Class Recorder Globally

Example: Configuring Media Class Using the Media Profile Recorder

```
Device> enable
Device# configure terminal
Device(config)# media class 100
Device(cfg-mediaclass)# recorder profile 100
Device(cfg-mediaclass)# end
```

Example: Configuring Media Class Using the Recorder Parameter

```
Device> enable
Device# configure terminal
Device(config)# media class 100
Device(cfg-mediaclass)# recorder parameter
Device(cfg-mediaclass-recorder)# media-recording 28
Device(cfg-mediaclass-recorder)# end
```

Example: Configuring the Dial Peer to Connect to MediaSense

```
Device> enable
Device# configure terminal
Device(config)# dial-peer voice 24 voip
Device(config-dial-peer)# destination-pattern 595959
Device(config-dial-peer)# session protocol sipv2
Device(config-dial-peer)# session target ipv4:10.42.29.7
Device(config-dial-peer)# session transport tcp
```

Example: Configuring the Media Class for a Dial Peer

```
Device> enable
Device# configure terminal
Device(config)# dial-peer voice 24 voip
Device(config-dial-peer)# session protocol sipv2
Device(config-dial-peer)# incoming called-number 9845
Device(config-dial-peer)# media-class 100
Device(config-dial-peer)# codec g711ulaw
Device(config-dial-peer)# end
```

Example: Enabling FIR for Video Calls Using RTCP

```
Device> enable
Device# configure terminal
Device(config)# media profile video 1
Device(cfg-mediaprofile)# ref-frame-req rtcp retransmit-count 4
```

Example: Enabling FIR for Video calls Using SIP INFO

```
Device> enable
Device# configure terminal
Device(config)# media profile video 1
Device(cfg-mediaprofile)# ref-frame-req sip-info
```

Example: Enabling the Association of a Video Profile with a Media Class

```
Device(config)# media class 100
Device(cfg-mediaclass)# video profile 101
```

Additional References for Network-Based Recording of Video Calls Using Cisco Unified Border Element

Related Documents

Related Topic	Document Title
Voice commands	Cisco IOS Voice Command Reference

Related Topic	Document Title
Cisco IOS Commands	Cisco IOS Master Command List, All Releases
Network-Based Recording Using Cisco UBE	Cisco Unified Border Element Protocol-Independent Features and Setup Configuration Guide

RFCs

RFCs	Title
RFC 5104	*Codec Control Messages in the RTP Audio-Visual Profile with Feedback (AVPF)*
RFC 5168	*XML Schema for Media Control*

Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	http://www.cisco.com/cisco/web/support/index.html

Feature Information for Network-Based Recording of Video Calls Using Cisco Unified Border Element

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 1: Feature Information for Network-Based Recording of Video Calls Using Cisco Unified Border Element

Feature Name	Releases	Feature Information
Network-Based Recording of Video Calls Using Cisco Unified Border Element	15.3(3)M	The Network-Based Recording of Video Calls Using Cisco Unified Border Element feature supports software-based forking and recording of video calls. The following commands were introduced or modified: **media profile video**, **ref-frame-req rtcp**, **ref-frame-req sip-info**, **video profile.**
Network-Based Recording of Video Calls Using Cisco Unified Border Element	Cisco IOS XE Release 3.10S	The Network-Based Recording of Video Calls Using Cisco Unified Border Element feature supports software-based forking and recording of video calls. The following commands were introduced or modified: **media profile video**, **ref-frame-req rtcp**, **ref-frame-req sip-info**, **video profile.**